

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions of the claims in the application.

What is claimed is:

1.(PREVIOUSLY PRESENTED) A method of allocating an arbitrarily divisible resource comprising the steps of:

receiving first data indicative of at least one bid comprising a quantity component indicating a requested quantity of said resource, and a price component;

receiving second data indicative of a new bid comprising a quantity component, a price component, and a bid fee;

first providing at least one portion of said resource to each of said at least one bid having a price component higher than the price component of said new bid;

second providing a second portion of said resource to said new bid responsive to said first providing step;

calculating by a computer processor said new bid's cost as a function of the price data component of said at least one bid having a price component lower than said price component of said new bid that does not receive the entirety of the quantity of said resource requested in said at least one bid's quantity component as a result of said second providing; and

storing cost data indicative of said new bid's calculated cost.

2. (ORIGINAL) The method of claim 1, wherein said resource is bandwidth.

3. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the amount of said second portion and said calculated cost are transmitted to an entity who made said new bid.
4. (PREVIOUSLY PRESENTED) The method of claim 1, wherein said second portion of said resource is utilized by an entity associated with said new bid.
5. (PREVIOUSLY PRESENTED) The method of claim 1, further comprising a step ordering said at least one bid corresponding to said first data by said at least one bid's price component.
6. (PREVIOUSLY PRESENTED) The method of claim 1, further comprising the step of retrieving data indicative of said resource's maximum capacity and wherein said first and second providing steps are responsive to said maximum capacity.
7. (PREVIOUSLY PRESENTED) The method of claim 6, wherein said resource is provided to said new bid only if said first portion of said resource is less than said maximum capacity.
8. (PREVIOUSLY PRESENTED) The method of claim 1, wherein said resource is provided in a first allocation before said new bid is processed.
9. (PREVIOUSLY PRESENTED) The method of claim 8, wherein said new bid's cost is calculated as a function of at least one previously allocated bid corresponding to said first data having the lowest price component of bids that previously were provided with a portion of said resource in said first allocation, but which were not allocated said portion due to said second providing step.

10. (PREVIOUSLY PRESENTED) The method of claim 1, wherein said new bid's cost is calculated as a function of a plurality of bids corresponding to said first data having price components that are lower than said new bid's price component.

11. (PREVIOUSLY PRESENTED) The method of claim 1, wherein said new bid's cost is calculated as a function of at least one bid corresponding to said first data having the lowest price component that would have received an allocation of said resource if said new bid was not received.

12. (PREVIOUSLY PRESENTED) The method of claim 11, wherein said new bid's cost is calculated as a function of a plurality of bids corresponding to said first data having price components that are lower than said new bid's price component.

13. (PREVIOUSLY PRESENTED) The method of claim 1, wherein one of said at least one bid is submitted by a processor performing said first and second allocation steps.

14. (ORIGINAL) The method of claim 1, wherein said at least one bid comprises valuation data comprising a plurality of price components associated with a plurality of quantity components.

15. (PREVIOUSLY PRESENTED) The method of claim 14, wherein said first and second providing steps are responsive to said plurality of price components and said quantities components.

16. (PREVIOUSLY PRESENTED) The method of claim 1, wherein said new bid comprises valuation data comprising a plurality of price components associated with a plurality of quantity components.

17. (PREVIOUSLY PRESENTED) The method of claim 16, wherein said second providing step is responsive to said new bid's plurality of price components and said quantity components.

18. (PREVIOUSLY PRESENTED) An apparatus for allocating an arbitrarily divisible resource comprising:

means for receiving at least one first bid comprising a quantity component and a price component;

means for receiving a new bid comprising a quantity component and a price component;

means for receiving a bid fee associated with said new bid;

means for first providing a first portion of said resource to each of said at least one bid having a price component higher than the price component of said new bid;

means for second providing a second portion of said resource to said new bid responsive to said first allocation step; and

computer processor for calculating said new bid's cost as a function of the price data component of said at least one bid having a price component lower than said price component of said new bid that does not receive the entirety of the quantity of said resource requested in said at least one bid's quantity component as a result of the operation of said means for second providing.

19. (ORIGINAL) The apparatus of claim 18, wherein said resource is bandwidth.

20. Canceled.

21. (ORIGINAL) The apparatus of claim 18, further comprising means for ordering said retrieved at least one first bid by said bid's price component.

22. (PREVIOUSLY PRESENTED) The apparatus of claim 18, further comprising means for retrieving said resource's maximum capacity and providing an allocation of said resource responsive to said maximum capacity.

23. (PREVIOUSLY PRESENTED) The apparatus of claim 22, wherein said resource is allocated to said new bid by said means for second providing only if said first portion is less than said maximum capacity.

24. (PREVIOUSLY PRESENTED) The apparatus of claim 18, wherein an initial allocation of said resource is completed by said means for first providing before said new bid is processed.

25. (PREVIOUSLY PRESENTED) The apparatus of claim 24, wherein said computer processor calculates said new bid's cost as a function of at least one of said at least one first bid having the lowest price component that was provided with at least a portion of said resource in said initial allocation.

26. (PREVIOUSLY PRESENTED) The apparatus of claim 25, wherein said computer processor calculates said new bid's cost as a function of a plurality of said at least one first bid having price components lower than the price component of said new bid.

27. (PREVIOUSLY PRESENTED) The apparatus of claim 18, wherein said computer processor calculates said new bid's cost as a function of at least one of said at least one first bid having the lowest price components which would have been provided at least a portion of said resource if said new bid was not made.

28. (PREVIOUSLY PRESENTED) The apparatus of claim 27, wherein said computer processor calculates said new bid's cost as a function of a plurality of said at least one first bid having price components lower than the price component of said new bid.

29. (PREVIOUSLY PRESENTED) The apparatus of claim 18, wherein one of said at least one first bid bids is submitted by an operator of said apparatus.

30. (PREVIOUSLY PRESENTED) The apparatus of claim 18, wherein said at least one first bid comprises valuation data comprising a plurality of price components associated with a plurality of quantity components.

31. (PREVIOUSLY PRESENTED) The apparatus of claim 30, wherein said second means for providing is responsive to said plurality of price components and said quantity components.

32. (PREVIOUSLY PRESENTED) The apparatus of claim 18, wherein said new bid comprises valuation data comprising a plurality of price components associated with a plurality of quantity components.

33. (PREVIOUSLY PRESENTED) The apparatus of claim 32, wherein said second means for providing is responsive to said new bid's plurality of price components and said quantity components.

34. Canceled.

35. Canceled.

36. Canceled.

37. Canceled.

38. Canceled.

39. Canceled.

40. Canceled.

41. Canceled.

42. Canceled.

43.(PREVIOUSLY PRESENTED) A method of allocating a divisible resource comprising the steps of:

receiving a list of previously submitted bids from previous bidders, each bid comprising at least one quantity component and at least one associated price component, said previously submitted bids sorted by said price components;

receiving a total quantity of said divisible resource to allocate;

receiving a new bid comprising at least one quantity component and at least one associated price component;

first providing a portion of said resource to the bidder of each previously submitted bid having a price component higher than said new bid's price component, in an amount equal to each respective bid's quantity component;

first determining the first remaining amount of said resource not allocated during said first providing step;

second providing, in response to said first determining, a portion of said resource to the bidder of said new bid in an amount equal to the lower of said quantity component of said new bid or said first remaining amount of said resource;

second determining a second remaining amount of said resource not allocated during said first and second providing steps;

third providing a portion of said second remaining amount of said resource to the bidder of a previously submitted bid having the highest price component lower than said new bid's price component,

repeating said third providing for the next highest previously submitted bid, until none of said second remaining amount remains to be provided;

third determining at least one previously submitted bid having a price component lower than the price component of said new bid that, if said new bid had not been made, would have been provided with a greater portion of said resource than was actually provided to that bidder and designating that bid an excluded allocation bid and designating said greater portion an excluded allocation quantity associated with said excluded allocation bid; and

calculating in a processor the cost paid by said new bidder as a function of the price component associated with said excluded allocation bid.

44.(PREVIOUSLY PRESENTED) The method of claim 43, wherein said third determining comprises determining each at least one previously submitted bid having a price component lower than the price component of said new bid that, if said new bid had not been made, would have been provided with a greater portion of said resource than was actually provided to that bidder, designating each such bid an excluded allocation bid and each such greater portion an excluded allocation quantity associated with the excluded allocation bid;

and wherein said calculating step comprises calculating, for each such excluded allocation bid, the respective product of the associated excluded allocation quantity and bid price and said cost paid by said bidder is a function of the sum of said respective products.



45. (PREVIOUSLY PRESENTED) The method of claim 43, wherein said third providing comprises providing the maximum of said second remaining amount and the quantity component of said previously submitted bid.

46. (PREVIOUSLY PRESENTED) The method of claim 9, wherein said new bid's cost is calculated as a function of the total cost that would have been paid by the submitter of said at least one previously allocated bid for said portion of resource if said submitter had paid the amount it bid for said previously allocated portion.